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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|------------------------|---------------------|------------------|
| 10/696,827 | 10/30/2003 | Raymond Elijah Barnett | TI-36061 | 1878 |
| 7590 | 08/23/2004 | | EXAMINER | |
| Dan Swayze Texas Instruments Incorporated M/S 3999 P. O. Box 655474 Dallas, TX 75265 | | | WELLS, KENNETH B | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2816 | |
| DATE MAILED: 08/23/2004 | | | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|------------------------------|------------------|-------------------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 10/696,827 | BARNETT, RAYMOND ELIJAH |
| | Examiner | Art Unit |
| | Kenneth B. Wells | 2816 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 16 July 2004.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) 8-14 and 33 is/are withdrawn from consideration.
- 5) Claim(s) 15-28 and 30-32 is/are allowed.
- 6) Claim(s) 1-7 and 29 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.

- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____.

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1. Applicant's election of species A (Fig. 1), corresponding to claims 1-7 and 15-32, is acknowledged, and claims 8-14 and 33 are withdrawn from consideration by the examiner. The arguments against the species restriction lack merit and thus the restriction requirement is hereby maintained and made final. Specifically, the argument that the two species identified by the examiner (i.e., Figs. 1 and 2) are not independent and distinct is not persuasive because patentably distinct species will of course have some relationship between them (i.e., by virtue of the fact that they are species of a disclosed genus) and thus applicant is not using the correct test as to whether two disclosed species (here, Figs. 1 and 2) are patentably distinct or not. The second argument, that there is no "serious burden" on the examiner in examining claims both species, is also not persuasive because what might not appear to be a burden from applicant's perspective may of course be a burden from the examiner's perspective. Thus, applicant's second argument is similarly insufficient for overcoming the restriction requirement. The restriction requirement is therefore final.

2. Claims 4 and 29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point

out and distinctly claim the subject matter which applicant regards as the invention.

On line 1 of claim 4, "a second closed loop buffer" lacks antecedent basis because no "first closed loop buffer" has been set forth in claim 1, from which claim 4 depends. It appears that perhaps this claim should refer back to either claim 2 or claim 3.

In claim 29, "flowing through the resistive sensor by the current" is unclear and should be reworded so as to make better sense.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Schenk.

Note Fig. 4a, where the recited "first current source" reads on OP5 (it inherently has current flowing therethrough); the recited "second current source" reads on OP3 (it inherently has current flowing therethrough); the recited "first resistor"

reads on R5; the recited "second resistor" reads on R6; the recited "third resistor" reads on R4; the recited "fourth resistor" reads on R3; the recited "resistive sensor" reads on the sensor element between resistors R3 and R4; and the recited "transconductance feedback block" reads on the combination of elements C3, OP1, R7 and R8. Note that all of the circuits elements in the figure are coupled together, either directly or indirectly (i.e., through intervening elements). The recited first and second ground (claims 6 and 7) read on the ground connection of C2 and R13, respectively. As an alternative interpretation, amplifier OP5 is the recited "second closed loop buffer" (claim 4) and the recited "second current source" is any one of elements R1, R2 and OP3.

4. Claims 15-28 and 30-32 are allowed.

Claim 28 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

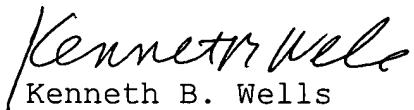
5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth B. Wells whose telephone number is (571)272-1757. The examiner

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can normally be reached on Monday through Friday from 8:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy P. Callahan, can be reached at (571)272-1740. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Kenneth B. Wells
Primary Examiner
Art Unit 2816

August 20, 2004